

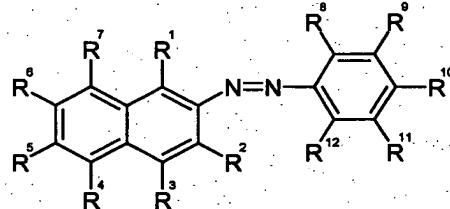
Patent claims:

1. Aqueous, colloidal gas black suspension, characterised in that it contains

5 a gas black,

15 an azo compound of the general formula 1

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(1)

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wherein R¹ to R¹² may be the same or different and consist of hydrogen, hydrophilic or hydrophobic groups, acceptor or donor substituents or parts of aliphatic, aromatic or heteroaromatic, acyclic, cyclic or polycyclic systems having acceptor, donor, hydrophilic or hydrophobic groups,

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and water.

2. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the gas black has a content of volatile constituents (950°C) of < 21 wt.%, a BET surface area of from 80 to 350 m²/g, a primary particle size of from 8 to 40 nm and a DBP number of from 40 to 200 ml/100 g.

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3. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the gas black content is < 30 wt.%.

4. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the content of azo compound of the general formula 1 is < 5 wt.%.
5. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the azo compound of the general formula 1 contains less than 30 wt.% impurity.
6. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the azo compound of the general formula 1 contains less than 10 wt.% salt.
- 10 7. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the azo compound is Acid Black 1, Mordant Green 17 or Mordant Blue 13.
8. Aqueous, colloidal gas black suspension according to claim 7, characterised in that the azo compound Acid Black 1, Mordant Green 17 or Mordant Blue 13 contains less than 30 wt.% impurity and less than 10 wt.% salt.
- 15 9. Aqueous, colloidal gas black suspension according to claim 1, characterised in that it contains biocides, wetting agents and/or additives.
- 20 10. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the wetting agent is a fatty alcohol ethoxylate, polyacrylic acid or/and derivatives thereof, copolymer containing acrylic acid, acrylic acid derivatives, styrenes, styrene derivatives and/or polyethers, lignosulfonate, alkyl-benzenesulfonate, naphthalenesulfonic acid derivative, copolymer containing maleic anhydride and/or maleic acid derivatives, or combinations of the mentioned wetting agents.
- 25 30 11. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the content of wetting agent is from 0 to 1 wt.%.

12. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the additive is an alcohol, glycol, heterocyclic compound or glycerol.
13. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the additive content is < 25 wt.%.
14. Process for the production of the aqueous, colloidal gas black suspension according to claim 1, characterised in that the gas black and the azo compound of the general formula 1 are dispersed in water.
15. Process for the production of the aqueous, colloidal gas black suspension according to claim 14, characterised in that the dispersion is carried out using bead mills, ultrasonic devices, high-pressure homogenisers, microfluidizers, Ultra-Turrax or comparable apparatuses.
16. Use of the aqueous, colloidal gas black suspension according to claim 1 in inks, ink-jet inks, surface coatings and coloured printing inks.
17. Ink, characterised in that it contains the aqueous, colloidal gas black suspension according to claim 1.